

5    **THAT WHICH IS CLAIMED IS:**

1. A non-aqueous plastisol composition comprising:

A. at least one organic polymer; and

B. an effective amount of a plasticizer composition comprising

at least one primary plasticizer selected from the group consisting of known

10    plasticizers for said polymer containing no unreacted alkanol groups; and

at least one secondary plasticizer selected from the group consisting of

monoesters derived from a dihydric alcohol and a monocarboxylic acid,

wherein the concentration of said secondary plasticizer is sufficient to reduce the

viscosity exhibited by said plastisol in the presence of said primary plasticizer alone

15    while remaining compatible with said plastisol.

2. A composition according to claim 1 wherein said primary plasticizer is

selected from the group consisting of esters of organic and organic acids.

20    3. A composition according to claim 2 wherein said secondary plasticizer is at

least one monoester of a dihydric alcohol and an organic acid.

4. A composition according to claim 3 wherein said monoester is a liquid at

25°C.

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5. A composition according to claim 4 wherein said secondary plasticizer

constitutes from 1 to 25 percent of the combined weights of primary and secondary

plasticizers and said dihydric alcohol contains from 2 to 10 carbon atoms.

5           6. A composition according to claim 5 wherein said polymer is polyvinyl  
chloride, and said primary plasticizer is selected from the group consisting of esters  
derived from benzoic acid and a monohydric alcohol, diesters derived from benzoic  
acid and a dihydric alcohol, diesters derived from phthalic acid and a monohydric  
alcohol, and esters of phosphoric acid.

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7. A composition according to claim 6 wherein said primary plasticizer is a  
diester of benzoic acid and a dihydric alcohol and at least a portion of said secondary  
plasticizer is the corresponding monoester and the total of all monoesters constitutes  
from 5 to 20 of the total weight of said primary and secondary plasticizers.

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8. A composition according to claim 7 wherein said primary plasticizer is at  
least one member selected from the group consisting of diethylene glycol dibenzoate,  
triethylene glycol dibenzoate and dipropylene glycol dibenzoate.

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9. A plastisol composition of claim 1 wherein the concentration of said  
plasticizer composition is from 10 to 100 parts by weight per 100 parts by weight of  
said organic polymer.

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10. In an improved method for preparing a plastisol wherein said method  
comprises blending a finely divided organic polymer with a primary plasticizer and a  
secondary plasticizer, the improvement comprising selecting the primary plasticizer  
from the group consisting of known plasticizers for said polymer containing no  
unreacted alkanol groups; and selecting said secondary plasticizer from the group  
consisting of monoesters derived from a dihydric alcohol and a monocarboxylic acid,

5 wherein the concentration of said secondary plasticizer is sufficient to reduce the  
viscosity exhibited by said plastisol in the presence of said primary plasticizer alone  
while remaining compatible with said plastisol.

11. A method according to claim 10 wherein said polymer is polyvinyl  
10 chloride, and said primary plasticizer is selected from the group consisting of esters  
derived from benzoic acid and a monohydric alcohol, diesters derived from benzoic  
acid and a dihydric alcohol, diesters derived from phthalic acid and a monohydric  
alcohol, and esters of phosphoric acid.

15 12. A method according to claim 11 wherein said primary plasticizer is a  
diester of benzoic acid and a dihydric alcohol and at least a portion of said secondary  
plasticizer is the corresponding monoester and the total of all monoesters constitutes  
from 5 to 20 of the total weight of said primary and secondary plasticizers.

20 13. A method according to claim 12 wherein said primary plasticizer is at least  
one member selected from the group consisting of diethylene glycol dibenzoate,  
triethylene glycol dibenzoate and dipropylene glycol dibenzoate.

14. A method according to claim 10 wherein the concentration of said  
25 plasticizer composition is from 10 to 100 parts by weight per 100 parts by weight of  
said organic polymer.